



COMPARATIVE STUDY OF IN SITU METHODS FOR POTENTIAL AND ACTUAL EVAPOTRANSPIRATION DETERMINATION AND THEIR CALCULATION BY SIMULATION MODEL

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Four in situ methods for potential and actual evapotranspiration determining were compared neutron gauge tensiometers gypsum blocks and lysimeters The actual and potential evapotranspiration were calculated by water balance equation and by using a simulation model for their determination

The aim of this study was mainly pointed on calculations of water use efficiency and transpiration coefficient in potential production situation This makes possible to choose the best way for water consumption optimization for a given crop The final results find with the best of the methods could be used for applying the principles of sustainable agricultural production in random object of Bulgarian agricultural area

Keywords Neutron gauge, actual and potential evapotranspiration, water use efficiency, transpiration coefficient, simulation model